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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/450,054	11/29/1999	ASHOK V. KRISHNAMOORTHY	32	7078

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EXAMINER
JACKSON, CORNELIUS H

ART UNIT	PAPER NUMBER
2828	

DATE MAILED: 09/24/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/450,054	KRISHNAMOORTHY, ASHOK V.	
	Examiner	Art Unit	
	Cornelius H. Jackson	2828	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 July 2002* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

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Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Acknowledgment

1. Acknowledgment is made that applicant's Amendment, filed on 22 July 2002, has been considered. Upon entrance of the Amendment, claims 2-6, 8 and 9 were amended. Claims 1-11 are now pending in the current application.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-5 and 10-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Watanabe et al. (5309001). Watanabe et al. disclose a network **Fig. 12a** for distributing a power signal in an optoelectronic circuit **350** comprising a plurality of electrically conductive pathways forming at least one level, wherein the portions of the conductive pathways are interconnected; a plurality of segments **353a-358b** forming each level, wherein each segment of the level is equal in length; means for coupling **347/352** the power signal from a primary input to a point at the center of a first level;

terminal nodes **359a-b** coupled at the extremities of a last level for supplying the power signal to devices that form at least a portion of the optoelectronic circuit **350**; and wherein the number of segments connecting the primary input to each of the terminal nodes is equal.

Regarding claim 2, Watanabe et al. disclose all stated limitations, **see Figs. 12a**.

Regarding claim 3, Watanabe et al. disclose all stated limitations, **see Figs. 16**.

Regarding claim 4, Watanabe et al. disclose all stated limitations, **see col. 15, lines 49-51 and claim 1 above**.

Regarding claim 5, Watanabe et al. disclose the terminal nodes are optoelectronic devices, **see col. 15, line 43-51 and claim 1 above**.

Regarding claims 10-11, it is inherent that the device claimed operates, using method as claimed; therefore, the rejection of the device applies to the method as well.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 6-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al. (5309001) in view of Olbrightet al. (5266794)/Schneider et al.

(5351256)/Lebby et al. (5337397). Watanabe et al., as applied to claims 1 above, teach all of the stated limitations except for the integrated circuits are VCSELs; instead, Watanabe et al. teach the integrated circuits are LEDs. It is well known in the laser art that one may use either laser source (e.g. LED or VCSEL) as a matter of obvious design choice, see Olbright et al. **col. 8, lines 65-68**/Schneider et al. **col. 1, lines 14-16**/ Lebby et al. **col. 3, lines 17-27**. Since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

Regarding claims 7-9, Watanabe et al. teach all the stated limitations except for the plurality of electrically conductive pathways being separate; instead, Watanabe et al. teach the pathways being formed of wider/broader pathways that diverge as it branches to a higher level/order, **see Figs. 5, 7, 9-10 and 18a and col. 9, line 54-col. 10, line 3, col. 11, line 11-col. 13, line 47 and col. 24, line 33-col. 26, line 20**. It would have been an obvious to one having ordinary skill in the art at the time the invention was made to separate the diverging wider/broader pathways into the individual pathways the wider/broader pathways eventually become, since the examiner takes Office Notice of the equivalence of the diverging wider/broader pathways and the plurality of separate pathways for their use in the electrical art and the selection of any of these known equivalents to improve the flow of current from a primary source to multiple regions would be within the level of ordinary skill in the art.

R sponse to Arguments

5. Applicant's arguments filed 22 July 2002 have been fully considered but they are not persuasive.

Applicant argues the following:

a. Watanabe et al. fails to disclose the terminal nodes coupled at the extremities of a last level for supplying said power signal to devices that form at least a portion of said optoelectronic circuit.

b. Watanabe et al. does not teach a network for distributing a power signal "wherein the number of segments connecting said primary input to each of said primary input to each of said terminal nodes is equal."

c. Watanabe et al. is directed to a different problem and discloses a different solution for solving the problem.

d. Olbright et al., Schneider et al., nor Lebby et al. fail to teach the terminal nodes coupled at the extremities of a last level for supplying said power signal to devices that form at least a portion of said optoelectronic circuit.

e. Olbright et al., Schneider et al., nor Lebby et al. teaching of a LED being interchangeable with the function of a VCSEL, in no way renders obvious a network for distributing a power signal, wherein the terminal nodes coupled at the extremities of a last level for supplying said power signal to devices that form at least a portion of said optoelectronic circuit.

Examiner reply to Applicant's arguments are as follows:

a. Watanabe et al. does to disclose the terminal nodes coupled at the extremities of a last level for supplying said power signal to devices that form at least a portion of said optoelectronic circuit. Although Watanabe et al. does not use the term "terminal nodes", but instead uses the term "contact portions". The "contact portions" of Watanabe et al. perform the same function and are placed in the same position as Applicant's "terminal nodes". Also there is no disclosure in the specifications of Applicant's application which describe the terminal nodes as being anything more than just a coupling point at the end of the last level of the network.

b. Watanabe et al. does teach a network for distributing a power signal "wherein the number of segments connecting said primary input to each of said primary input to each of said terminal nodes is equal." As seen in figure 12a, from the primary input **352** two conductive pathways **353a and 353b** branch out in two different directions which braches out even further until the terminal nodes are reaches. These two conductive pathways **353a and 353b** branching out in two different directions which braches out even further until the terminal nodes are symmetrical; therefore the number of segments connecting said primary input to each of said primary input to each of said terminal nodes is equal.

c. The fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

d. Examiner agrees.

e. By Olbright et al., Schneider et al., nor Lebby et al. teaching the obviousness of a LED being interchangeable with the function of a VCSEL is well known. It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute one laser for another, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cornelius H. Jackson whose telephone number is (703) 306-5981. The examiner can normally be reached on 8:00 - 5:00, Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Ip can be reached on (703) 308-3098. The fax phone numbers for the organization where this application or proceeding is assigned are (703)308-7722 for regular communications and (703)308-7721 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

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chj
September 10, 2002